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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,683	04/07/2004	Osamu Yamada	S008-P04073US	8530

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EXAMINER

LAMB, CHRISTOPHER RAY

ART UNIT PAPER NUMBER

2627

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,683	<b>Applicant(s)</b> YAMADA ET AL.	
	<b>Examiner</b> Christopher R. Lamb	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/18/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 10/1-4, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroiwa (US 6,246,650).

Regarding claim 1:

Kuroiwa discloses:

An optical disc playback apparatus which makes an optical disc rotate at given rotational speed and reproduces a record signal based on light reflected from the optical disc (Fig. 1), comprising:

a jitter amount detector that detects a jitter amount based on a signal obtained from said reflected light (Fig. 12); and

a rotational speed adjustment circuit that adjusts said rotational speed of said optical disc based on said jitter amount (column 16, lines 5-15).

Regarding claim 2:

In Kuroiwa said rotational speed adjustment circuit performs said adjusting of said rotational speed prior to said reproducing from said optical disc (Fig. 13; column 17, lines 5-45: the speed is adjusted in steps F406-F408; reproduction begins in later step F411).

Regarding claims 3 and 4:

In Kuroiwa said rotational speed adjustment circuit adjusts said rotational speed to be multiplied speed when said jitter amount is equal or less than a threshold value (Fig. 13: steps F406, F408).

Regarding claims 10/1, 10/2, 10/3, and 10/4:

The optical disc playback apparatus of Kuroiwa is controlled by a microcomputer (Fig. 1): thus Kuroiwa discloses a microcomputer which functions at least as said rotational speed adjustment circuit.

Regarding claim 12:

Kuroiwa discloses:

A rotational speed control method for an optical disc playback apparatus which makes an optical disc rotate at given rotational speed and reproduces a record signal based on light reflected from the optical disc (Fig. 13), said method comprising the steps of:

detecting a jitter amount based on a signal obtained from said reflected light (Fig. 13: step F405); and

adjusting said rotational speed of said optical disc based on said jitter amount (Fig. 13: steps F406-F408).

Art Unit: 2627

4. Claims 5-8, 10/5-8, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by McKernan (US 2001/0046196).

Regarding claim 5:

McKernan discloses:

An optical disc playback apparatus which makes an optical disc rotate at given rotational speed and reproduces a record signal based on light reflected from the optical disc (Fig. 2), comprising:

an error rate amount detector that detects an error rate amount based on a signal obtained from said reflected light (paragraph 26); and

a rotational speed adjustment circuit that adjusts said rotational speed of said optical disc based on said error rate amount (paragraph 30).

Regarding claim 6:

McKernan discloses wherein said rotational speed adjustment circuit performs said adjusting of said rotational speed during said reproducing from said optical disc (paragraphs 29-30).

Regarding claims 7 and 8:

McKernan discloses wherein said rotational speed adjustment circuit adjusts said rotational speed to be multiplied speed when said error rate amount is equal or less than a threshold value (paragraph 30).

Regarding claims 10/5-8:

McKernan discloses a microcomputer used in the optical disc playback apparatus which functions at least as said rotational speed adjustment circuit (Fig. 2).

Art Unit: 2627

Regarding claim 13:

McKernan discloses:

A rotational speed control method for an optical disc playback apparatus which makes an optical disc rotate at given rotational speed and reproduces a record signal based on light reflected from the optical disc, said method comprising the steps of:

detecting an error rate amount based on a signal obtained from said reflected light (paragraph 30); and

adjusting said rotational speed of said optical disc based on said error rate amount (paragraph 30).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroiwa in view of McKernan.

Regarding claim 9:

Kuroiwa discloses:

An optical disc playback apparatus which makes an optical disc rotate at given rotational speed and reproduces a record signal based on light reflected from the optical disc (Fig. 1), comprising:

Art Unit: 2627

a jitter amount detection circuit that detects a jitter amount based on a signal obtained from said reflected light (Fig. 12);

a first rotational speed adjustment circuit that adjusts said rotational speed of said optical disc based on said jitter amount (column 16, lines 5-15).

Kuroiwa does not disclose:

an error rate amount detector that detects an error rate amount based on a signal obtained from said reflected light; and

a second rotational speed adjustment circuit that adjusts said rotational speed of said optical disc based on said error rate amount.

McKernan discloses:

an error rate amount detector that detects an error rate amount based on a signal obtained from said reflected light (paragraphs 26, 30); and

a rotational speed adjustment circuit that adjusts said rotational speed of said optical disc based on said error rate amount (paragraph 30).

McKernan discloses that this avoids reading errors (column 12).

It would have been obvious to one of ordinary skill at the art at the time of the invention to include in Kuroiwa an error rate amount detector that detects an error rate amount based on a signal obtained from said reflected light, and a rotation speed adjustment circuit that adjusts said rotational speed of said optical disc based on said error rate amount.

The motivation would have been to avoid reading errors.

Regarding claim 11:

Art Unit: 2627

Kuroiwa in view of McKernan discloses a microcomputer used in an optical disc playback apparatus which functions at least as said first and second rotational speed adjustment circuits (both Kuroiwa and McKernan have microcomputers to control their respective rotational speed adjustment circuits: thus their combination would certainly have one).

Regarding claim 14:

This is a method claim corresponding to apparatus claim 9. The method is met when the apparatus operates.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (572) 272-5264. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 12/7/06

  
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